

WHAT IS CLAIMED IS:

1. A lead-free solder alloy ^{consisting essentially of} comprising 0.1 - 2 wt% Cu, 0.002 - 1 wt% Ni and the remaining percent Sn.

2. A lead-free solder alloy according to Claim 1, wherein the weight percentage of Cu falls within a range from 0.3 to 0.7 percent.

3. A lead-free solder alloy according to Claim 2, wherein ~~the weight percentage of Cu falls within a range from 0.3 to 0.7 percent and~~ the weight percentage of Ni falls within a range from 0.04 to 0.1 percent.

4. A lead-free solder alloy according to one of Claims 1 through 3, wherein Ni is added to a solved base alloy of Sn-Cu.

5. A lead-free solder alloy according to one of Claims 1 through 3, wherein Cu is added to a solved base alloy of Sn-Ni.

6. A lead-free solder alloy according to one of Claims 1 through 3, wherein 0.001-1 wt% Ge is further added.

Adc
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